## Washington

Science and Engineering Profile													
Characteristic	State	U.S.	Rank	Characteristic	State	U.S.	Rank						
Doctoral scientists, 1999 <sup>1</sup>	13,250	518,670	15	Total R&D performance, 1998 (millions)		\$214,668	9						
Doctoral engineers, 1999 <sup>1</sup>	2,370	107,100	13	Industry R&D, 1998 (millions)	\$7,476	\$163,480	7						
S&E doctorates awarded, 1999 <sup>1</sup>	446	25,953	18	Academic R&D, 1998 (millions)	\$528	\$25,342	13						
of which, in life sciences	32%	25%		of which, in life sciences	67%	57%							
in social sciences	19%	16%		in environmental sciences	12%	6%							
in engineering	16%	21%		in engineering	9%	16%							
S&E postdoctorates, 1998 <sup>1</sup>				Public higher education current-fund									
in doctorate-granting institutions	1,104	39,494	9	expenditures, 1997 (millions)	\$3,127	\$125,236	12						
S&E graduate students, 1998 <sup>1</sup>				Number of SBIR awards, 1990-98	795	35,413	12						
in doctorate-granting institutions	5,835	422,834	25	Patents issued to state residents, 1999	1,827	83,901	12						
Population, 1999 (thousands)	5,756	276,580	15	Gross state product, 1998 (billions)	\$193	\$8,800	14						
Civilian labor force, 1999 (thousands)	3,076	140,536	15	of which, agriculture	2%	1%							
				manufacturing, mining, construction	18%	22%							
Personal income per capita, 1999	\$30,392	\$28,542	13	transportation, communication, utilities	9%	9%							
				wholesale and retail trade	17%	16%							
Federal spending				finance, insurance, real estate	18%	19%							
Total expenditures, 1999 (millions)	\$31,993	\$1,508,933	16	services		21%							
R&D obligations, 1998 (millions)	\$1,244	\$70,445	16	government	14%	12%							

NOTE: Rankings and totals are based on data for the 50 States, District of Columbia, and Puerto Rico. Reliability of the estimates of industry R&D and of doctoral scientists and engineers varies by State, because the sample allocation was not based on geography. The rankings do not take into account the margin of error of estimates from sample surveys.

<sup>1</sup>Data on graduate students, doctoral scientists and engineers, and postdoctorates include all graduate degree (except M.D.) candidates and recipients in S&E fields, including health fields. Data on S&E doctorates awarded do not include health fields.

Federal Obligations for Research and Development by Agency and Performer: Fiscal Year 1998												
	Performer											
	Total	Federal Intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank, total				
Agency	[In thousands of dollars]											
Total, all agencies	1,244,174	183,685	149,770	427,331	355,630	121,688	6,070	16				
Department of Agriculture	36,264	23,367	0	0	12,728	159	10	11				
Department of Commerce	61,629	55,976	0	1,980	3,174	89	410	4				
Department of Defense	421,089	86,511	5,753	302,979	24,164	1,682	0	19				
Department of Energy	161,184	118	137,474	5,603	17,726	263	0	9				
Dept. of Health & Human Services	381,681	7,787	5,276	15,581	234,239	115,911	2,887	8				
Department of the Interior	11,445	9,151	0	19	2,001	0	274	15				
Department of Transportation	5,148	0	1,267	1,577	15	0	2,289	19				
Environmental Protection Agency	5,272	0	0	0	4,035	1,037	200	19				
National Aeronautics and Space Admin	109,947	748	0	97,044	10,484	1,671	0	11				
National Science Foundation	50,515	27	0	2,548	47,064	876	0	15				
State rank, total	16	17	10	17	10	8	14	na				

NOTE: Federal R&D obligations are as reported by funding agencies. Ranks and totals are based on data for the 50 States, District of Columbia, and Puerto Rico.

KEY: FFRDC = federally funded research and development center; SBIR = small business innovation research; na = not applicable.

SOURCES: Prepared by the National Science Foundation/Division of Science Resources Studies. Data compiled from numerous sources -- see the section, "Data Sources for Science and Engineering (S&E) State Profiles".